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Support construction for desk- or table-top.

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FR-A- 2 490 941
US-A- 3 559 592
US-A- 3 883 202**

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Description

The invention relates to a support construction of a desk or table with a top in particular for use in office buildings and the like, said support construction comprising two feet, at least one of the feet being positioned near one side of the top and consisting of a lower and an upper horizontal beam, vertically running means connecting these beams and at least one longitudinally extending channel provided near said vertically running connecting means, which channels is open to the outside and can be closed by a lid for inserting therein electric cables or the like, the upper horizontal beam being made such that it, by means of a screw, is securely connected substantially in its center to a longitudinal beam extending as well in horizontal direction and square to the upper horizontal beam for interconnecting the two feet.

Such a support construction is known from EP-A-0 125 869. In case of this known support construction the vertical running means connecting the horizontal beams is formed by two spaced upright members. The lower ends of these members are connected by means of a screw to the lower horizontal beam of the foot, while the upper end of each upright member is connected to a bracket such that two brackets of the upright members are extending away from each other. Said brackets and upright members being connected to each other by means of a other lateral bracket by means of screws.

The channel for inserting electric cables or the like in it is formed by a cable receiving member which is slidably engageable between the two above mentioned upright members.

A disadvantage of this known support construction is, that a great number of parts is needed for obtaining the vertical running connecting means, the channel for electric cables or the like, the upper horizontal beam and for obtaining the connection between all these parts.

Now the invention intends to provide a support construction by which these disadvantages are removed to a large extent.

According to the invention it is provided that said connecting means is in the shape of one vertical post in which the channel is incorporated, said upper beam being shaped as one integral whole, both said lower and upper beam being provided with vertical parts for insertion into said vertical post to obtain a force-fitting connection between this post and said horizontal beams.

So, according to the invention the foot of a support construction comprises substantially three parts, to wit a horizontal lower beam, a horizontal upper beam and one vertical post, which by force-fitting are connected to each other so that much labour is saved. Further a very stable construction is obtained.

According to a preferred embodiment of the support construction according to the invention, the longitudinal beam is obtained by extrusion and in cross-section is carried out such that a snapping connection with a cable gutter can be realized, said beam comprising a continuous cavity with at each

end thereof a sleeve which is externally provided with thread for mounting it in the longitudinal beam and being internally provided with screw thread for accepting the screw, by which the connection between the longitudinal beam and a foot is obtained.

It can be remarked that from FR-A-2 490 941 it is known to obtain a longitudinal support beam by extrusion. In case of this known support beam, however, the ends of it are not directly connected to support feet as this is the case in the support construction according to the present invention.

For a fast removal of the lid closing off the channel in the post, and so for allowing a fast insertion of cables in and for removing them out of the channel, provision may be made that the lid is connected with the post by a snap connection.

The invention will now be elucidated by means of an embodiment, shown in the drawing, in which:

Fig. 1 shows a side-view of a support construction according to the invention;

Fig. 2 shows a top view of a part of the construction according to Fig. 1 and in particular of one foot and a part of the longitudinal beam;

Fig. 3 shows a front view of a part of the construction according to Fig. 1;

Fig. 4 shows a partial section over the connection between the upper part of a foot and a longitudinal beam according to the line IV-IV in Fig. 1;

Fig. 5 shows a cross-section over a longitudinal beam and a part of a cable gutter connected therewith, along the line V-V in fig. 4;

Fig. 6 shows a cross-section over a post of a foot along the line VI-VI in Fig. 1;

Fig. 7 shows a vertical section and partial front view over a part of a foot, omitting the longitudinal beam, substantially along the line VII-VII in Fig. 3; and

Fig. 8 shows a cross-section over that part of a horizontal beam of a foot, that is incorporated into the post.

The support construction represented in the drawing and in particular in the Figs. 1-3 thereof, comprises two feet 1, which are interconnected by means of the longitudinal beam 2. Each foot 1 is composed of an upper horizontal beam 3, a lower horizontal beam 4 and a post 5.

As appears in particular from Fig. 6, the post 5 comprises a wall 6 with such a shape that two cavities 7 are formed, closed off in transverse direction, and three cavities 8, which are open sideways. In the cavities 8 cables or wires may be positioned, whereafter closing off of the cavities 8 may take place by means of the lid 9. The lid 9 consists of the plate 10 of which one of the longitudinal edges is shaped in such a manner that an edge section 11 is obtained, which may be properly positioned into a cavity 12 in the wall 6 of the post 5, while the plate 10 is further provided with a part 13 in an about square position thereto and shaped in such a manner that it may snap behind a part of a wall 14, limiting a cavity 8. In this way the lid 9 may be fixed on the post 5 in a simple but firm manner and can easily be removed therefrom again.

As appears in particular from the Figs. 4, 7 and 8 the horizontal beams 3 and 4 will be manufactured as castings whereby the vertical parts 16 connect with the substantially horizontal part 15 thereof. The parts 16 have in cross-section a substantially square shape, such that when mounting the post 5 they may be received force fitted into the cavities 7 of the post which are indicated in Fig. 6. In this manner a very stable foot 1 is obtained.

Fig. 4 shows the connection between the upper horizontal beam 3 and the longitudinal beam 2. It will be obvious that also the other end of the longitudinal beam 2 is connected with a foot 1 in the manner shown in Fig. 4. A working top 17 may then be positioned on the structure obtained.

The cross-section of the longitudinal beam 2 is represented in Fig. 5. The profile is such, that a cable gutter 18 may be affixed thereon in a simple manner, to which purpose the cable gutter is provided with parts 19 and 20 which are about square to each other. The part 19 is inserted into a cavity, not specifically indicated, of the longitudinal beam 2 and the edge 20 snaps over an extending part, not further indicated, of the longitudinal beam 2. In this manner a simple and fast mounting of a cable gutter 18 on the longitudinal beam 2 is possible. A cavity 21 is present in the longitudinal beam. As appears in particular from Fig. 4, an internal screw-thread has been applied at the end of the longitudinal beam 2, into which a sleeve 23 can be screwed which is provided with the internal screw-thread 24, for screwing therein a screw 25. The screw 25 extends further through a closing block 26, which closes the V-shaped groove 27, provided in the side wall 28 of the horizontal beam 3. In this manner an easy mounting of the longitudinal beam is possible, while the surface of the closing block 26 engaging the wall 28, will extend slightly slanted, as the wall 28 also will deviate somewhat from the vertical line in connection with the release of the casted product from the mould. In order to connect a longitudinal beam 2 at the other side of the horizontal beam 3, if wanted, the other side surface 29 of the longitudinal beam is also provided with a groove 27, which in Fig. 4 is closed off by means of an ornamental plate 30.

Claims

1. A support construction of a desk or table with a top (17) in particular for use in office buildings and the like, said support construction comprising two feet (1) at least one of the feet (1) being positioned near one side of the top (17) and consisting of a lower and an upper horizontal beam (3, 4), vertically running means (5) connecting these beams and at least one longitudinally extending channel (8) provided near said vertically running connecting means (5), which channel (8) is open to the outside and can be closed by a lid (9) for inserting therein electric cables or the like, the upper horizontal beam (3) being made such that it, by means of a screw (25), is securely connected substantially in its center to a longitudinal beam (2) extending as well in horizontal direction and square to the upper horizontal beam (3) for interconnecting the two feet (1), character-

ized in that said connecting means is in the shape of one vertical post (5) in which the channel (8) is incorporated, said upper beam (4) being shaped as one integral whole, both said lower and upper beam (3, 4) being provided with vertical parts (16) for insertion into said vertical post (5) to obtain a force-fitting connection between this post (5) and said horizontal beams (3, 4).

2. A support construction according to claim 1, characterized in that the longitudinal beam (2) is obtained by extrusion and in cross-section is carried out such that a snapping connection with a cable gutter (18) can be realized, said beam (2) comprising a continuous cavity (21) with at each end thereof a sleeve (23) which is externally provided with screw thread (22) for mounting it in the longitudinal beam (2) and being internally provided with screw thread (24) for accepting the screw (25), by which the connection between the longitudinal beam (2) and a foot (1) is obtained.

Patentansprüche

1. Untergestell eines Schreibtisches oder Tisches mit einer Platte (17), insbesondere zur Verwendung in Bürogebäuden und dergleichen, wobei das genannte Untergestell zwei Füße (1) umfasst, wenigstens einer der Füße (1) in der Nähe einer Seite der Platte (17) angeordnet ist und aus einem unteren und einem oberen horizontalen Träger (3, 4), einem vertikal verlaufenden, diese Träger verbindenden Glied (5) und wenigstens einem sich in der Längsrichtung erstreckenden Kanal (8) besteht, der in der Nähe des genannten vertikal verlaufenden Verbindungsglieds (5) vorgesehen ist, wobei der genannte Kanal (8) nach aussen offen ist und durch einen Deckel (9) geschlossen werden kann zur Aufnahme von elektrischen Kabeln und dergleichen darin, wobei der obere horizontale Träger (3) derart ausgebildet ist, dass er mittels einer Schraube (25) im wesentlichen in seiner Mitte sicher mit einem Langsträger (2) verbunden ist, der sich ebenso in horizontaler Richtung und quer zum oberen horizontalen Träger (3) erstreckt um die zwei Füße (1) miteinander zu verbinden, dadurch gekennzeichnet, dass das genannte Verbindungsglied die Form eines vertikalen Ständers (5) hat, in dem der Kanal (8) mit aufgenommen ist, wobei der obere Träger (4) einstückig ausgebildet ist, wobei sowohl der untere als der obere Träger (3, 4) mit vertikalen Teilen (16) zur Aufnahme in dem vertikalen Ständer (5) zum Erhalt einer Presspassung zwischen diesem Ständer (5) und den horizontalen Trägern (3, 4) versehen sind.

2. Untergestell nach Anspruch 1, dadurch gekennzeichnet, dass der Längsträger (2) durch Extrusion erhalten ist und im Querschnitt derart ausgebildet ist, dass eine Schnappverbindung mit einer Kabelrinne (18) realisiert werden kann, wobei der Träger (2) einen ununterbrochenen Hohlraum (21) mit an jedem Ende desselben einer Büchse (23) umfasst, die auswendig mit Schraubengewinde (22) versehen ist um sie im Längsträger (2) anzubringen und inwendig mit Schraubengewinde (24) zur Aufnahme der Schraube (25) versehen ist, wodurch die

Verbindung zwischen dem Längsträger (2) und einem Fuss (1) erhalten wird.

Revendications

1. Structure de support d'un bureau ou d'une table comportant un dessus (17), utilisable en particulier dans des bâtiments administratifs, cette structure de support comprenant deux pieds (1), l'un au moins des pieds (1) étant placé près de l'un des côtés du dessus (17) et se composant d'une poutrelle horizontale inférieure et d'une poutrelle horizontale supérieure (3, 4), de moyens de jonction (5) qui s'étendent verticalement et relient ces poutrelles et d'au moins un conduit s'étendant longitudinalement (8), prévu auprès desdits moyens de jonction s'étendant verticalement (5) conduit qui est ouvert vers l'extérieur et peut être fermé par un couvercle (9) pour recevoir des câbles électriques ou similaires, la poutrelle horizontale supérieure (3) étant réalisée de telle façon qu'au moyen d'une vis (25), elle soit solidement raccordée, pratiquement en son milieu, à une poutrelle longitudinale (2) qui s'étend également en direction horizontale et perpendiculairement à la poutrelle horizontale supérieure (3) pour relier les deux pieds (1) l'un à l'autre, caractérisée en ce que lesdits moyens de jonction se présentent sous la forme d'une unique colonne verticale (5) dans laquelle le conduit (8) est incorporé, ladite poutrelle supérieure (4) étant réalisée sous la forme d'un ensemble d'une seule pièce, lesdites poutrelles inférieure et supérieure (3, 4) étant munies l'une et l'autre de parties verticales (16) destinées à être insérées dans ladite colonne verticale (5) pour l'assemblage par ajustement serré entre cette colonne (5) et lesdites poutrelles horizontales (3, 4).

2. Structure de support selon la revendication 1, caractérisée en ce que la poutrelle longitudinale (2) est obtenue par extrusion et est profilée en section transversale de telle manière qu'un assemblage par encliquetage avec une gouttière pour câbles (18) puisse être réalisé, cette poutrelle (2) contenant une cavité continue (21) avec, à chaque extrémité, une douille (23) qui est munie extérieurement d'un filetage (22) pour son montage dans la poutrelle longitudinale (2) et est munie intérieurement d'un filetage (24) pour recevoir la vis (25) par laquelle l'assemblage entre la poutrelle longitudinale (2) et un pied (1) est obtenu.

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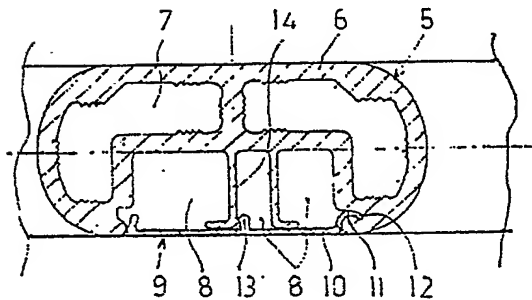
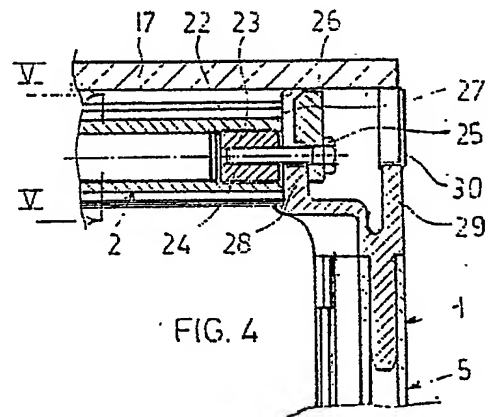
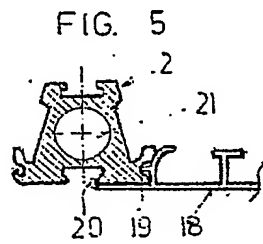
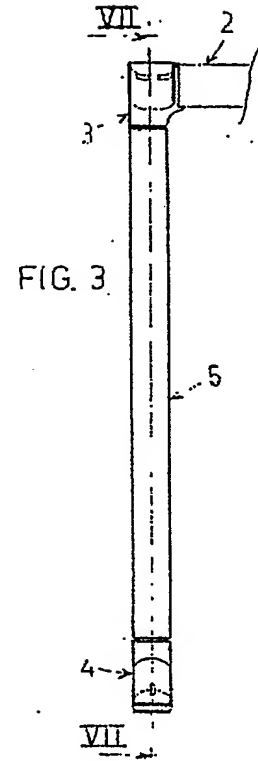
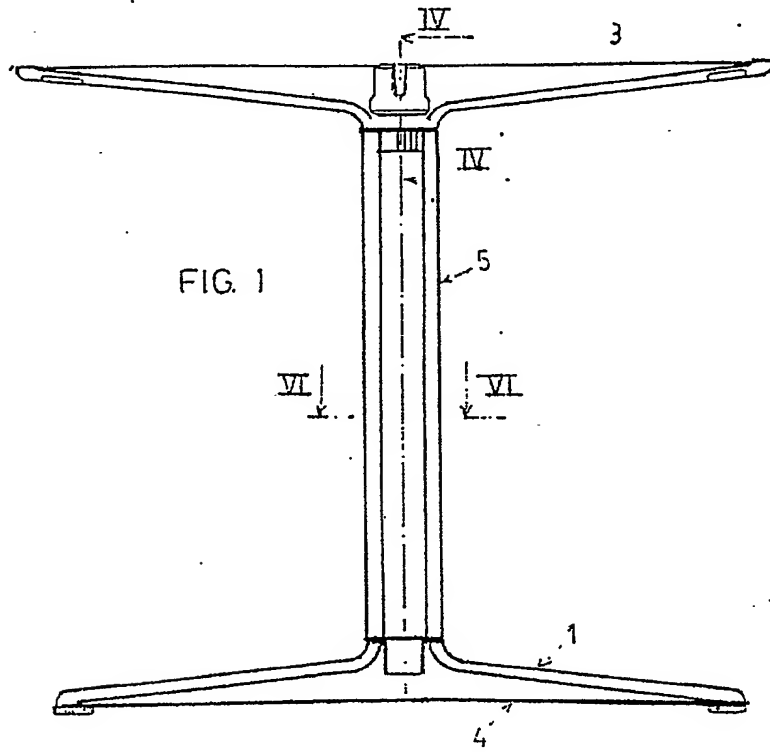
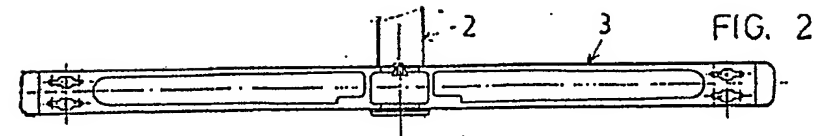


FIG. 6

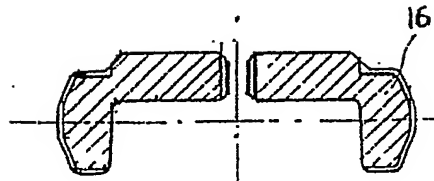


FIG. 8

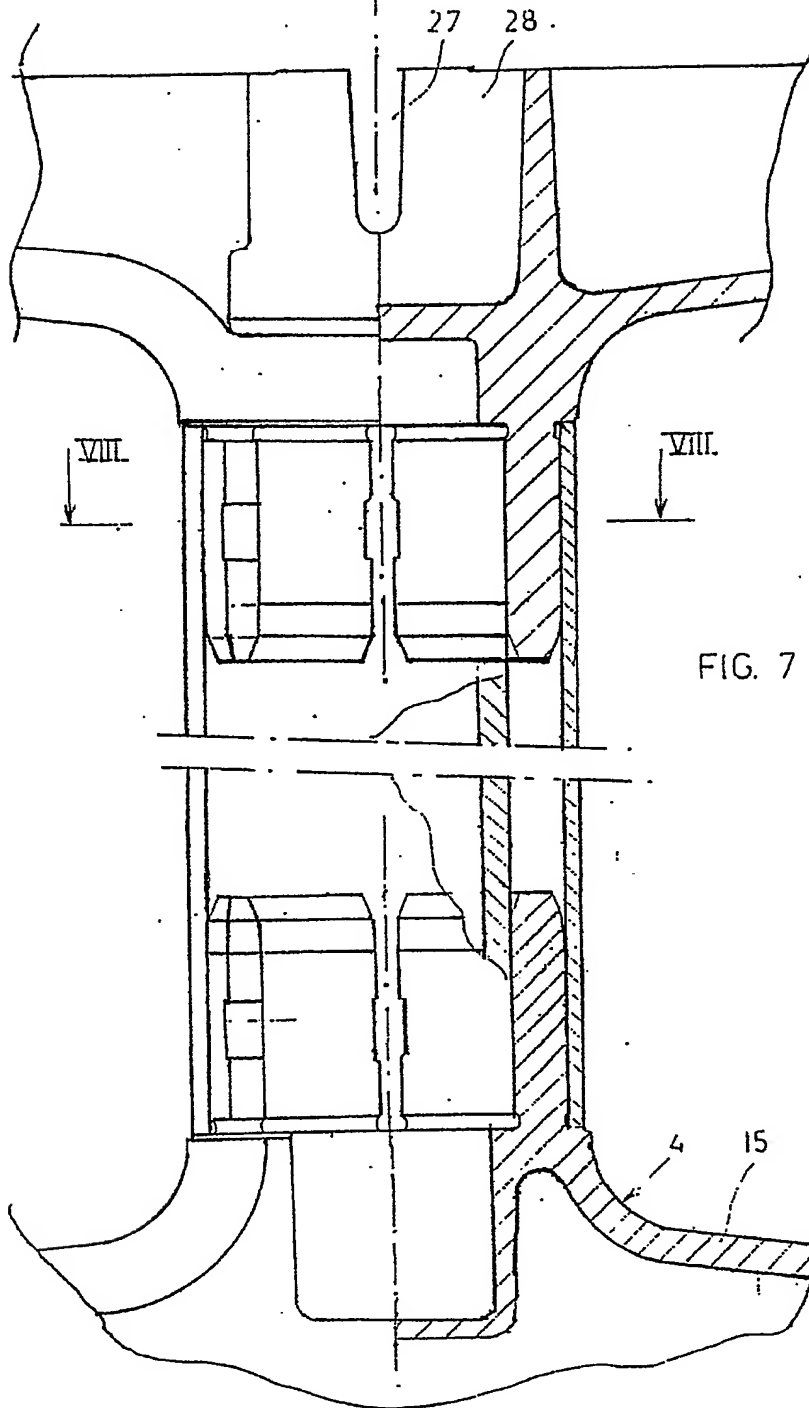


FIG. 7